INDEX TO AUTHORS

ABELL, RICHARD G. See PAGE and ABELL, 215

ACKART, R. J. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

ADAMS, MARK H. See GOEBEL and ADAMS, 435

ADAMS, W. S. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

ALEXANDER, R. C. See SANDERS and ALEXANDER, 71

ANDERSON, THOMAS F. See CHAMBERS, HENLE, LAUFFER, and ANDERSON, 265

—. See PLOTZ, SMADEL, ANDERSON, and CHAMBERS, 355

BANG, FREDERIK B. The course of experimental infection of the chick embryo with the virus of equine encephalomyelitis, 337

—. Synergistic action of *Haemophilus influenzae suis* and the swine influenza virus on the chick embryo, 7

BISHOP, MARSHALL. See TRASK, PAUL, and MELNICK, 531

BULLOWA, JESSE G. M. See PERLMAN, BULLOWA, and GOODKIND, 97

CARTER, J. R. See MADDEN, CARTER, KATTUS, MILLER, and WHIPPLE, 277

CASALS, J., CURNEN, EDWARD C., and THOMAS, LEWIS. Venezuelan equine encephalomyelitis in man, 521

CHAMBERS, LESLIE A., and HENLE, WERNER. Studies on the nature of the virus of influenza. I. The dispersion of the virus of influenza A in tissue emulsions and in extra-embryonic fluids of the chick, 251

—, —, LAUFFER, MAX A., and ANDERSON, THOMAS F. Studies on the nature of the virus of influenza. II. The size of the infectious unit in influenza A, 265

—. See PLOTZ, SMADEL, ANDERSON, and CHAMBERS, 355

CLAUDE, ALBERT, and POTTER, JAMES S. Isolation of chromatin threads from the resting nucleus of leucemic cells, 345

COBURN, ALVIN F., and KAPP, ELEANOR M. The effect of salicylates on the precipitation of antigen with antibody, 173

CURNEN, EDWARD C. See CASALS, CURNEN, and THOMAS, 521

DAVEY, HARRIET WOLF. See ELMAN AND DAVEY, 1

DURLACHER, S. H. See WINKLER, DURLACHER, HOFF, and MAN, 473

EICHELBERGER, LILLIAN. The distribution of water and electrolytes between blood and skeletal muscle in experimental hypertension, 205

ELMAN, ROBERT, and DAVEY, HARRIET WOLF. Studies on hypoalbuminemia produced by protein-deficient diets. III. The correction

of hypoalbuminemia in dogs by means of large plasma transfusions, 1

ENGEL, FRANK L., WINTON, MARY G., and LONG, C. N. H. Biochemical studies on shock. I. The metabolism of amino acids and carbohydrate during hemorrhagic shock in the rat, 397

ERVIN, D. M. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

FOX, JOHN P. Immunity to yellow fever encephalitis of monkeys and mice immunized by neural and extraneural routes, 487

—. Non-fatal infection of mice following intracerebral inoculation of yellow fever virus, 507

FRANCIS, THOMAS, JR. See STOCK and FRANCIS, 323

FRIEDMAN, MEYER, and KAPLAN, ALEX. Studies concerning the site of renin formation in the kidney. IV. The renin content of the mammalian kidney following specific necrosis of proximal convoluted tubular epithelium, 65

GLASER, R. W., and STANLEY, W. M. Biochemical studies on the virus and the inclusion bodies of silkworm jaundice, 451

GOEBEL, WALTHER F., and ADAMS, MARK H. The immunological properties of the heterophile antigen and somatic polysaccharide of pneumococcus, 435

GOLDBLATT, HARRY, KAHN, JOSEPH R., and LEWIS, HARVEY A. Studies on experimental hypertension. XIX. The production of persistent hypertension in sheep and goats, 297

GOLDBLATT, HARRY, KATZ, YALE J., LEWIS, HARVEY A., and RICHARDSON, EVELYN. Studies on experimental hypertension. XX. The bioassay of renin, 309

GOODKIND, RUTH. See PERLMAN, BULLOWA, and GOODKIND, 97

GREEN, ROBERT H. See HAVENS, WATSON, GREEN, LAVIN, and SMADEL, 139

HASKINS, A. L., JR. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

HAVENS, WALTER P., JR., WATSON, DENNIS W., GREEN, ROBERT H., LAVIN, GEORGE I., and SMADEL, JOSEPH E. Complement fixation with the neurotropic viruses, 139

HENLE, WERNER. See CHAMBERS and HENLE, 251

—. See CHAMBERS, HENLE, LAUFFER, and ANDERSON, 265

HOAGLAND, CHARLES L. See SMADEL, HOAGLAND, and SHEDLOVSKY, 165

HOFF, H. E. See WINKLER, DURLACHER, HOFF, and MAN, 473

HUDSON, N. PAUL, SIGEL, M. MICHAEL, and MARKHAM, F. S. Antigenic relationship of British swine influenza strains to standard human and swine influenza viruses. The use of chicken and ferret antisera in red cell agglutination, 467

KAHN, JOSEPH R. See GOLDBLATT, KAHN, and LEWIS, 297

KAPLAN, ALEX. See FRIEDMAN and KAPLAN, 65

KAPP, ELEANOR M. See COBURN and KAPP, 173
KATTUS, A. A., JR. See MADDEN, CARTER, KATTUS, MILLER, and WHIPPLE, 277
KATZ, YALE J. See GOLDBLATT, KATZ, LEWIS, and RICHARDSON, 309
KIDD, JOHN G. See PARSONS and KIDD, 233
KIRBY, WILLIAM M. M., and RANTZ, LOWELL A. Quantitative studies of sulfonamide resistance, 29

LAUFFER, MAX A. See CHAMBERS, HENLE, LAUFFER, and ANDERSON, 265
LAVIN, GEORGE I. See HAVENS, WATSON, GREEN, LAVIN, and SMADEL, 139
LAWRENCE, J. S., SYVERTON, J. T., ACKART, R. J., ADAMS, W. S., ERVIN, D. M., HASKINS, A. L., JR., SAUNDERS, R. H., JR., STRINGFELLOW, M. B., and WETRICH, R. M. The virus of infectious feline agranulocytosis. II. Immunological relation to other viruses, 57
—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41
LEWIS, HARVEY A. See GOLDBLATT, KAHN, and LEWIS, 297
—. See GOLDBLATT, KATZ, LEWIS, and RICHARDSON, 309
LONG, C. N. H. See ENGEL, WINTON, and LONG, 397

MADDEN, S. C., CARTER, J. R., KATTUS, A. A., JR., MILLER, L. L., and WHIPPLE, G. H. Ten amino acids essential for plasma protein production effective orally or intravenously, 277
MAN, E. B. See WINKLER, DURLACHER, HOFF, and MAN, 473
MARKHAM, F. S. See HUDSON, SIGEL, and MARKHAM, 467
MELNICK, JOSEPH L. The ultracentrifuge as an aid in the detection of poliomyelitis virus, 195
—. See TRASK, PAUL, and MELNICK, 531
MILLER, L. L. See MADDEN, CARTER, KATTUS, MILLER, and WHIPPLE, 277
—. See ROBSCHEIT-ROBBINS, MILLER, and WHIPPLE, 375
MORGAN, ISABEL M. See OLITSKY, SCHLESINGER, and MORGAN, 359

OLITSKY, PETER K., SCHLESINGER, R. WALTER, and MORGAN, ISABEL M. Induced resistance of the central nervous system to experimental infection with equine encephalomyelitis virus. II. Serotherapy in Western virus infection, 359

PAGE, IRVINE H., and ABELL, RICHARD G. The state of the vessels of the mesentery in shock produced by constricting the limbs and the behavior of the vessels following hemorrhage, 215
PARSONS, ROBERT J., and KIDD, JOHN G. Oral papillomatosis of rabbits: a virus disease, 233
PAUL, JOHN R. See TRASK and PAUL, 545
—. See TRASK, PAUL, and MELNICK, 531
PERLMAN, ELY, BULLOWA, JESSE G. M., and GOODKIND, RUTH. An immunological and electrophoretic comparison of the antibody to C polysaccharide and the C-reactive protein of acute phase serum, 97
PHILLIPS, ROBERT ALLAN. A method for the determination of the blue dye T-1824 in plasma, 421
PLOTZ, HARRY, SMADEL, JOSEPH E., ANDERSON, THOMAS F., and CHAMBERS, LESLIE A. Morphological structure of rickettsiae, 355

POTTER, JAMES S. See CLAUDE and POTTER, 345

RANTZ, LOWELL A. See KIRBY and RANTZ, 29

RICHARDSON, EVELYN. See GOLDBLATT, KATZ, LEWIS, and RICHARDSON, 309

RIORDAN, JOHN T. See TRASK, PAUL, and MELNICK, 531

ROBSCHEIT-ROBBINS, F. S., MILLER, L. L., and WHIPPLE, G. H. Hemoglobin and plasma protein. Simultaneous production during continued bleeding as influenced by amino acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, 375

ROMA, MICHAEL. See EICHELBERGER, 205

ROTHEN, ALEXANDRE. See SHEDLOVSKY, ROTHEN, and SMADEL, 155

SANDERS, MURRAY, and ALEXANDER, R. C. Epidemic keratoconjunctivitis. I. Isolation and identification of a filtrable virus, 71

SAUNDERS, R. H., JR. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

SCHLESINGER, R. WALTER. See OLITSKY, SCHLESINGER, and MORGAN, 359

SEASTONE, C. V. The occurrence of mucoid polysaccharide in hemolytic streptococci of human origin, 21

SHEDLOVSKY, THEODORE, ROTHEN, ALEXANDRE, and SMADEL, JOSEPH E. The LS-antigen of vaccinia. III. Physical-chemical properties of LS-antigen and some of its degradation products, 155

SHEDLOVSKY, THEODORE. See SMADEL, HOAGLAND, and SHEDLOVSKY, 165

SHOPE, RICHARD E. The swine lungworm as a reservoir and intermediate host for swine influenza virus. III. Factors influencing transmission of the virus and the provocation of influenza, 111

—. IV. The demonstration of masked swine influenza virus in lungworm larvae and swine under natural conditions, 127

SIGEL, M. MICHAEL. See HUDSON, SIGEL, and MARKHAM, 467

SIGURDSSON, BJÖRN. Mammalian red cells as a source of "small particles," 315

SIMON, FRANK A. Allergenic relationship of the pollens of dwarf and giant ragweed to several of their botanic relatives, 185

SMADEL, JOSEPH E., HOAGLAND, CHARLES L., and SHEDLOVSKY, THEODORE. The LS-antigen of vaccinia. IV. Chemical analysis of LS and the effect of chymotrypsin on LS, 165

—. See HAVENS, WATSON, GREEN, LAVIN, and SMADEL, 139

—. See PLOTZ, SMADEL, ANDERSON, and CHAMBERS, 355

—. See SHEDLOVSKY, ROTHEN, and SMADEL, 155

STANLEY, W. M. See GLASER and STANLEY, 451

STOCK, C. CHESTER, and FRANCIS, THOMAS, JR. The inactivation of the virus of lymphocytic choriomeningitis by soaps, 323

STRINGFELLOW, M. B. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 41

SYVERTON, J. T., LAWRENCE, J. S., ACKART, R. J., ADAMS, W. S., ERVIN, D. M., HASKINS, A. L., JR., SAUNDERS, R. H., JR., STRINGFELLOW, M. B., AND WETRICH, R. M. The virus of infectious feline agranulocytosis. I. Characters of the virus: pathogenicity, 41

—. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

THOMAS, LEWIS. See CASALS, CURNEN, and THOMAS, 521

TRAGER, WILLIAM. Further studies on the survival and development *in vitro* of a malarial parasite, 411

—. The influence of biotin upon susceptibility to malaria, 557

TRASK, JAMES D., and PAUL, JOHN R. The detection of poliomyelitis virus in flies collected during epidemics of poliomyelitis. II. Clinical circumstances under which flies were collected, 545

—, —, and MELNICK, JOSEPH L. The detection of poliomyelitis virus in flies collected during epidemics of poliomyelitis. I. Methods, results, and types of flies involved, 531

WATSON, DENNIS W. See HAVENS, WATSON, GREEN, LAVIN, and SMADEL, 139

WETRICH, R. M. See LAWRENCE, SYVERTON, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICH, 57

—. See SYVERTON, LAWRENCE, ACKART, ADAMS, ERVIN, HASKINS, SAUNDERS, STRINGFELLOW, and WETRICK, 41

WHIPPLE, G. H. See MADDEN, CARTER, KATTUS, MILLER, and WHIPPLE, 277

—. See ROBSCHEIT-ROBBINS, MILLER, and WHIPPLE, 375

WINKLER, A. W., DURLACHER, S. H., HOFF, H. E., and MAN, E. B. Changes in lipid content of serum and of liver following bilateral renal ablation or ureteral ligation, 473

WINTON, MARY G. See ENGEL, WINTON, and LONG, 397

INDEX TO SUBJECTS

ACIDS, amino, and carbohydrate, metabolism during hemorrhagic shock, 397

—, amino, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, influence on simultaneous production of hemoglobin and plasma protein during continued bleeding, 375

—, amino, ten, essential for plasma protein production, effective orally or intravenously, 277

Agglutination, red cell, use of chicken and ferret antisera, antigenic relation of British swine influenza strains to standard human and swine influenza viruses, 467

Agranulocytosis, infectious feline, virus, immunological relation to other viruses, 57

—, infectious feline, virus, pathogenicity, 41

Albuminemia, hypo-, produced by protein-deficient diets, correction by means of large plasma transfusions, 1

Allergenic relation of dwarf and giant ragweed pollens to botanic relatives, 185

Amino acids and carbohydrate, metabolism during hemorrhagic shock, 397

— acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, influence on simultaneous production of hemoglobin and plasma protein during continued bleeding, 375

— acids, ten, essential for plasma protein production, effective orally or intravenously, 277

Antibody, precipitation of antigen, effect of salicylates, 173

— to C polysaccharide and C-reactive protein of acute phase serum, immunological and electrophoretic comparison, 97

Antigen, heat-labile and heat-stable, of vaccinia, chemical analysis of LS, and effect of chymotrypsin, 165

—, heat-labile and heat-stable, of vaccinia, physical-chemical properties and degradation products, 155

—, heterophile, and somatic polysaccharide, pneumococcus, immunological properties, 435

—, precipitation with antibody, effect of salicylates, 173

Antigenic relation of British swine influenza strains to standard human and swine influenza viruses, use of chicken and ferret antisera in red cell agglutination, 467

Antisera, chicken and ferret, use in red cell agglutination, antigenic relation of British swine influenza strains to standard human and swine influenza viruses, 467

BIOCHEMICAL studies on hemorrhagic shock, metabolism of amino acids and carbohydrate, 397

— studies on virus and inclusion bodies of silkworm jaundice, 451

Biotin, influence upon susceptibility to malaria, 557

Bleeding, continued, simultaneous production of hemoglobin and plasma protein during, as influenced by amino acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, 375

Blood corpuscle, red. *See* Erythrocyte.

— plasma. *See* Plasma.

Blood and skeletal muscle, distribution of water and electrolytes between, in hypertension, 205
— vessels, mesentery, state in shock produced by constricting limbs, and behavior of vessels following hemorrhage, 215
Bodies, inclusion, and virus, of silkworm jaundice, biochemical studies, 451
Botanic relatives of dwarf and giant ragweed, allergenic relation of pollens, 185
British swine influenza strains, antigenic relation to standard human and swine influenza viruses, use of chicken and ferret antisera in red cell agglutination, 467

CARBOHYDRATE, and amino acids, metabolism during hemorrhagic shock, 397
Casein, serum, and hemoglobin digests, simultaneous production of hemoglobin and plasma protein during continued bleeding as influenced by amino acids, plasma, hemoglobin, and, 375
Cat agranulocytosis virus, infectious, immunological relation to other viruses, 57
— agranulocytosis virus, infectious, pathogenicity, 41
Cell, blood, red. *See* Erythrocyte.
—, leucemic, resting nucleus, isolation of chromatin threads, 345
Centrifuge, ultra-, in detection of poliomyelitis virus, 195
Chemical analysis of LS-antigen of vaccinia, and effect of chymotrypsin, 165
Chemical-physical properties of heat-labile and heat-stable antigen of vaccinia, 155
Choriomeningitis, lymphocytic, virus, inactivation by soaps, 323
Chromatin threads, isolation from resting nucleus of leucemic cells, 345
Chymotrypsin, effect on LS-antigen of vaccinia, 165
Complement fixation with neurotropic viruses, 139
Conjunctivitis, kerato-, epidemic, isolation and identification of filtrable virus, 71
Corpuscle, blood, red. *See* Erythrocyte.

DEFICIENCY, protein, diets, hypoalbuminemia produced by, 1
Degradation products and physical-chemical properties of heat-labile and heat-stable antigen of vaccinia, 155
Diets, protein-deficient, hypoalbuminemia produced by, 1
Digests, serum, hemoglobin, and casein, simultaneous production of hemoglobin and plasma protein during continued bleeding as influenced by amino acids, plasma, hemoglobin, and, 375
Disease, virus, oral papillomatosis of rabbits, 233
Dye, blue, T-1824, method for determination in plasma, 421

ELECTROLYTES and water, distribution between blood and skeletal muscle in hypertension, 205
Electrophoretic and immunological comparison of antibody to C polysaccharide and C-reactive protein of acute phase serum, 97
Embryo, chick, course of infection with equine encephalomyelitis virus, 337
—, chick, dispersion of influenza A virus in tissue emulsions and extra-embryonic fluids, 251
—, chick, synergistic action of *Haemophilus influenzae suis* and swine influenza virus, 7
Encephalitis, yellow fever, immunity after immunization by neural and extraneural routes, 487

Encephalomyelitis, equine, Venezuelan, in man, 521
—, equine, virus, course of chick embryo infection with, 337
—, equine, virus, induced resistance of central nervous system to infection with, serotherapy in Western virus infection, 359
Epidemic keratoconjunctivitis, isolation and identification of filtrable virus, 71
Epidemics, poliomyelitis, flies collected during, detection of virus in, clinical circumstances under which flies were collected, 545
—, poliomyelitis, flies collected during, detection of virus in, methods, results, and types of flies involved, 531
Epithelium, tubular, convoluted, proximal, renin content of mammalian kidney following specific necrosis of, 65
Erythrocyte agglutination, use of chicken and ferret antisera, antigenic relation of British swine influenza strains to standard human and swine influenza viruses, 467
—, mammalian, source of small particles, 315

FEVER, yellow. *See* Yellow fever. Filtrable virus of epidemic keratoconjunctivitis, isolation and identification, 71
Fixation, complement. *See* Complement.
Flies collected during poliomyelitis epidemics, detection of virus in, clinical circumstances under which flies were collected, 545
— collected during poliomyelitis epidemics, detection of virus in, methods, results, and types of flies involved, 531

HAEMOPHILUS *influenzae suis* and swine influenza virus, synergistic action on chick embryo, 7
Heat-labile and heat-stable antigen of vaccinia, chemical analysis of LS and effect of chymotrypsin, 165
— and heat-stable antigen of vaccinia, physical-chemical properties and degradation products, 155
Hemoglobin and plasma protein, simultaneous production during continued bleeding as influenced by amino acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, 375
Hemolytic streptococci, human origin, occurrence of mucoid polysaccharide in, 21
Hemophilus influenzae suis. *See Haemophilus influenzae suis*.
Hemorrhage, state of mesentery vessels in shock produced by constricting limbs, and behavior of vessels following, 215
Hemorrhagic shock, metabolism of amino acids and carbohydrate, 397
Heterophile antigen and somatic polysaccharide of pneumococcus, immunological properties, 435
Horse encephalomyelitis, Venezuelan, in man, 521
— encephalomyelitis virus, course of chick embryo infection with, 337
— encephalomyelitis virus, induced resistance of central nervous system to infection with, serotherapy in Western virus infection, 359
Hypertension, bioassay of renin, 309
—, distribution of water and electrolytes between blood and skeletal muscle in, 205
—, persistent, production in sheep and goats, 297
Hypoalbuminemia produced by protein-deficient diets, correction by means of large plasma transfusions, 1

IMMUNITY, yellow fever encephalitis, after immunization by neural and extraneural routes, 487
Immunological and electrophoretic comparison of antibody to C polysaccharide and C-reactive protein of acute phase serum, 97
— properties of heterophile antigen and somatic polysaccharide of pneumococcus, 435
— relation of infectious feline agranulocytosis virus to other viruses, 57
Influenza A virus, dispersion in tissue emulsions and in extra-embryonic fluids of chick, 251
— A virus, size of infectious unit, 265
—, swine, British, antigenic relation to standard human and swine influenza viruses, use of chicken and ferret antisera in red cell agglutination, 467
—, swine, factors influencing transmission of virus and provocation of, 111
—, swine, masked virus in lungworm larvae and swine under natural conditions, 127
—, swine, virus, and *Haemophilus influenzae suis*, synergistic action on chick embryo, 7
Injection, ten amino acids essential for plasma protein production effective by, 277
Inoculation, intracerebral, of yellow fever virus, non-fatal infection following, 507

JAUNDICE, silkworm, virus and inclusion bodies, biochemical studies, 451

KERATOCONJUNCTIVITIS, epidemic, isolation and identification of filtrable virus, 71
Kidney ablation, bilateral, changes in lipid content of serum and of liver following, 473
Kidney, mammalian, renin formation, content following specific necrosis of proximal convoluted tubular epithelium, 65

LARVAE, lungworm, masked swine influenza virus in swine and, 127
Leucemic cells, resting nucleus, isolation of chromatin threads, 345
Lipid content of serum and of liver, changes following bilateral renal ablation or ureteral ligation, 473
Liver and serum, lipid content, changes following bilateral renal ablation or ureteral ligation, 473
Lungworm, swine, as reservoir and intermediate host for swine influenza virus, 111, 127
Lymphocytic choriomeningitis virus, inactivation by soaps, 323

MALARIA, influence of biotin on susceptibility to, 557
Malarial parasite, survival and development *in vitro*, 411
Mammalian kidney, renin content following specific necrosis of proximal convoluted tubular epithelium, 65
— red cells, source of small particles, 315
Man, hemolytic streptococci, occurrence of mucoid polysaccharide in, 21
— and swine influenza viruses, standard, antigenic relation to British swine influenza strains, use of chicken and ferret antisera in red cell agglutination, 467
—, Venezuelan equine encephalomyelitis in, 521
Meningitis, chorio-, lymphocytic, virus, inactivation by soaps, 323
Mesentery vessels, state in shock produced by constricting limbs, and behavior of vessels following hemorrhage, 215

Metabolism of amino acids and carbohydrate during hemorrhagic shock, 397
Morphological structure of rickettsiae, 355
Mouth, papillomatosis of rabbits, virus disease, 233
—, ten amino acids essential for plasma protein production effective by, 277
Muscle, skeletal, and blood, distribution of water and electrolytes between, in hypertension, 205

NECROSIS, specific, of proximal convoluted tubular epithelium, renin content of mammalian kidney following, 65
Nervous system, central, induced resistance to infection with equine encephalomyelitis virus, serotherapy in Western virus infection, 359
Neural and extraneural routes, immunity to yellow fever encephalitis after immunization by, 487
Neurotropic viruses, complement fixation, 139
Nucleus, resting, of leucemic cells, isolation of chromatin threads, 345

PAPILLOMATOSIS, oral, of rabbits, virus disease, 233
Parasite, malarial, survival and development *in vitro*, 411
Pathogenicity, infectious feline agranulocytosis virus, 41
Physical-chemical properties of heat-labile and heat-stable antigen of vaccinia, 155
Plasma, blue dye T-1824 in, method for determination, 421
— protein and hemoglobin, simultaneous production during continued bleeding as influenced by amino acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, 375
Plasma protein, ten amino acids essential for production effective orally or intravenously, 277
— transfusions, large, correction of hypoalbuminemia by means of, 1
Pneumococcus, heterophile antigen and somatic polysaccharide, immunological properties, 435
Poliomyelitis virus, detection in flies collected during epidemics, clinical circumstances under which flies were collected, 545
— virus, detection in flies collected during epidemics, methods, results, and types of flies involved, 531
— virus, detection, ultracentrifuge as aid, 195
Pollens, dwarf and giant ragweed, allergenic relation to botanic relatives, 185
Polysaccharide, C, antibody to, and C-reactive protein of acute phase serum, immunological and electrophoretic comparison, 97
—, mucoid, occurrence in hemolytic streptococci of human origin, 21
—, somatic, and heterophile antigen, pneumococcus, immunological properties, 435
Precipitation of antigen with antibody, effect of salicylates, 173
Protein, C-reactive, of acute phase serum, and antibody to C polysaccharide, immunological and electrophoretic comparison, 97
—, plasma, and hemoglobin, simultaneous production during continued bleeding as influenced by amino acids, plasma, hemoglobin, and digests of serum, hemoglobin, and casein, 375
—, plasma, ten amino acids essential for production effective orally or intravenously, 277
Protein-deficient diets, hypoalbuminemia produced by, 1

RAGWEED, dwarf and giant, pollens, allergenic relation to botanic relatives, 185
Renal. *See* Kidney.
Renin, bioassay, 309
— formation in kidney, content of mammalian kidney following specific necrosis of proximal convoluted tubular epithelium, 65
Resistance, induced, of central nervous system to infection with equine encephalomyelitis virus, serotherapy in Western virus infection, 359
—, sulfonamide, quantitative studies, 29
Rickettsiae, morphological structure, 355

SALICYLATES, effect on precipitation of antigen with antibody, 173
Serotherapy in infection with Western equine encephalomyelitis virus, induced resistance of central nervous system, 359
Serum, acute phase, C-reactive protein of, and antibody to C polysaccharide, immunological and electrophoretic comparison, 97
—, hemoglobin, and casein digests, simultaneous production of hemoglobin and plasma protein during continued bleeding as influenced by amino acids, plasma, hemoglobin, and, 375
— and liver, lipid content, changes following bilateral renal ablation or ureteral ligation, 473
Shock, hemorrhagic, metabolism of amino acids and carbohydrate, 397
— produced by constricting limbs, state of mesentery vessels in, and behavior following hemorrhage, 215
Silkworm jaundice, virus and inclusion bodies, biochemical studies, 451
Skeletal muscle and blood, distribution of water and electrolytes between, in hypertension, 205
Soaps, inactivation of lymphocytic choriomeningitis virus by, 323
Streptococci, hemolytic, human origin, occurrence of mucoid polysaccharide in, 21
Sulfonamide resistance, quantitative studies, 29
Susceptibility to malaria, influence of biotin, 557
Swine influenza, British, antigenic relation to standard human and swine influenza viruses, use of chicken and ferret antisera in red cell agglutination, 467
— influenza virus and *Haemophilus influenzae suis*, synergistic action on chick embryo, 7
— lungworm as reservoir and intermediate host for swine influenza virus, 111, 127

TISSUE emulsions and extra-embryonic fluids of chick, dispersion of influenza A virus in, 251
Transfusions, plasma, large, correction of hypoalbuminemia by means of, 1
Transmission of swine influenza virus and provocation of influenza, factors influencing, 111
Tubular epithelium, proximal convoluted, renin content of mammalian kidney following specific necrosis of, 65

ULTRACENTRIFUGE in detection of poliomyelitis virus, 195
Ureteral ligation, changes in lipid content of serum and of liver following, 473

VACCINIA, heat-labile and heat-stable antigen, chemical analysis of LS and effect of chymotrypsin, 165

Vaccinia, heat-labile and heat-stable antigen, physical-chemical properties and degradation products, 155
Venezuelan equine encephalomyelitis in man, 521
Virus, agranulocytosis, infectious feline, immunological relation to other viruses, 57
—, agranulocytosis, infectious feline, pathogenicity, 41
— disease, oral papillomatosis of rabbits, 233
—, encephalomyelitis, equine, induced resistance of central nervous system to infection with, serotherapy in Western virus infection, 359
—, equine encephalomyelitis, course of chick embryo infection with, 337
—, filtrable, of epidemic keratoconjunctivitis, isolation and identification, 71
— and inclusion bodies of silkworm jaundice, biochemical studies, 451
—, influenza A, dispersion in tissue emulsions and in extra-embryonic fluids of chick, 251
—, influenza A, size of infectious unit, 265
—, influenza, swine, factors influencing transmission of virus and provocation of influenza, 111
—, influenza, swine, and *Haemophilus influenzae suis*, synergistic action on chick embryo, 7
Virus, influenza, swine, masked, in lungworm larvae and swine under natural conditions, 127
—, lymphocytic choriomeningitis, inactivation by soaps, 323
—, poliomyelitis, detection in flies collected during epidemics, clinical circumstances under which flies were collected, 545
—, poliomyelitis, detection in flies collected during epidemics, methods, results, and types of flies involved, 531
—, poliomyelitis, detection, ultracentrifuge as aid, 195
—, yellow fever, non-fatal infection following intracerebral inoculation, 507
Viruses, neurotropic, complement fixation, 139
— standard human and swine influenza, and British swine influenza, antigenic relation, use of chicken and ferret antisera in red cell agglutination, 467

WATER and electrolytes, distribution between blood and skeletal muscle in hypertension, 205

YELLOW fever encephalitis, immunity after immunization by neural and extraneural routes, 487
— fever virus, intracerebral inoculation, non-fatal infection following, 507